portion with a pointed front end, and a rear portion with a rounded rear end having two generally opposite outer sides; wherein the middle portion is wider than the front and rear portions.

b. a gantry mounted on a rack structure and movable horizontally for carrying a gripper mechanism which is vertically movable on the gantry and horizontally moveable with the gantry, the gripper mechanism having a pair of generally oppositely disposed and synchronically movable gripping jaws each having an inner side for engagement with said outer sides of said reagent pack;

c. a power assembly for actuating the respective movement of said gantry, said gripper mechanism and said gripping jaws;

d. a storage nest having a multiplicity of compartments aligned in vertical columns and horizontal rows, each adapted for storing one of the respective reagent packs;

e. a pipetting nest having a multiplicity of compartments aligned in at least one horizontal row, each adapted for retaining one of respective reagent packs for simultaneous pipetting;

f. at least one vertical transport route between two adjacent and spaced apart columns of said compartments for allowing the vertical movement of said gripper mechanism, and at least one horizontal transport route between two adjacent and spaced apart rows of said compartments for allowing the horizontal movement of said gripper

mechanism carried by said gantry, for transporting said reagent packs between said storage nest and said pipetting nest;

g. means for positioning and positively retaining said reagent pack by said gripper mechanism, including holes with tapered conical opening on said outer sides of said reagent pack and complementary conical pins on said inner sides of said gripping jaws, for causing said reagent pack to be slightly lifted up when engaged by said gripping jaws and moved in or out of said storage compartment; and

h. means for maintaining precise pipetting position of said reagent pack, including spring-loaded v-shaped members located in said pipetting compartment, for limiting the movement of said reagent pack during pipetting.

9. (Amended) A transporting and storing system used in conjunction with an immunodiagnostic instrument, comprising:

a. a multiplicity of reagent packs;

b. a gantry movably mounted on a rack structure for carrying a gripper mechanism, the gripper mechanism having gripping jaws for engagement with said reagent pack;

c. a power assembly for actuating the respective movement of said gantry, said gripper mechanism and said gripping jaws;

d. a storage nest having a multiplicity of compartments each adapted for storing a respective one of said reagent packs;

e. a pipetting nest having a multiplicity of compartments each adapted for retaining a respective one of said reagent packs for simultaneous pipetting;

f. at least one transport route for allowing movement of said gripper mechanism carried by said gantry for transporting said reagent packs between said storage nest and said pipetting nest;

g. means for positioning and positively retaining said reagent pack by said gripper mechanism, including complementary features on said reagent pack and said gripping jaws, for causing said reagent pack to be slightly lifted up when engaged by said gripping jaws and moved in or out of said storage compartment; and

h. means for maintaining precise pipetting position of said reagent pack, including spring-loaded members located in said pipetting compartment, for limiting the movement of said reagent pack during pipetting.